REMARKS

Claims 1-32 are rejected. Claims 1-32 remain pending. Claims 1, 2, 6, 10-13,

17, 21-23, 28 and 32 are amended herein. No new matter is added as a result of the

claim amendments.

35 U.S.C. § 102 Rejections

Claims 1-32 are rejected under 35 U.S.C. 102(b) as being anticipated by

Mamiya et al. (5,764,322), hereinafter referred to as "Mamiya." The Applicants

respectfully submit that the embodiments of the present invention recited in Claims

1, 12, and 23 are not taught or suggested by Mamiya. Claim 1 of the present

invention recites (emphasis added):

a backlight device; a reflective display disposed above said backlight device; and an embedded light guide extending through said reflective display

operable to conduct light from said backlight device to an area above said reflective display wherein the light is reflected onto said reflective display.

Independent Claims 12 and 23 recite similar Claim limitations.

The Applicants continue to assert that Mamiya teaches away from the present

invention in reciting a transmissive liquid crystal display. For example, in column 1,

lines 26-27, Mamiya teaches, "a conventional transmissive type liquid crystal display

unit..." The Applicants respectfully submit that the apparatus taught by Mamiya is

not operable with the reflective display recited in Claims 1, 12, and 23 of the present

invention because the opacity of a reflective display makes a backlighting device as

taught by Mamiya ineffective.

PALM-3698.SG

Examiner: RAO, STEVEN H.

Serial No.: 09/997,532 Group Art Unit: 2814

8

The Applicants respectfully submit that the apparatus of Mamiya teaches a backlight device which evenly distributes light across a back surface of a liquid crystal display. For example, column 6, lines 66-67 and column 7, line 1 of Mamiya state, "the glass substrate of a liquid crystal display panel is positioned on the upper surface of the light guiding body 114." In other words, Mamiya teaches that the light guiding body is disposed entirely underneath and is separate from the transmissive liquid crystal device. Similar teachings are found in column 8, lines 34-35; column 10; lines 19-24; and column 11, lines 36-41. The Applicants respectfully submit that the claim limitation of embedded light guides which extend through a reflective display recited in Claims 1, 12, and 23 is therefore neither taught nor suggested by Mamiya.

Moreover, Figure 8 of Mamiya shows a liquid crystal display panel 100 comprising array-side glass substrate 120 and cell-side glass substrate 122 disposed above light guiding sheet 1, light reflecting plate 108, and polarizing plate 116. In describing the operation of the light guiding sheet, Mamiya teaches that a great part of the light emitted from light source 114 is incident on the glass substrate 120 and the remaining part is incident on the end face of light guiding sheet 1. Mamiya then teaches that various pathways of the light are refracted by glass substrates 120 and 122, pass through polarizing plate 116, and are reflected by light reflecting plate 108. Subsequently, the light is emitted toward the glass substrate. Because the films 4 and 6, which comprise light guiding sheet 1, are evenly distributed across the entire back surface of liquid crystal display panel 100, the light is distributed in a generally

Serial No.: 09/997,532 PALM-3698.SG Examiner: RAO, STEVEN H. Group Art Unit: 2814 even pattern across the back of the liquid crystal display. While this type of illuminating apparatus is suitable for a transmissive LCD display, the opacity of a typical reflective display renders backlight devices ineffective.

Thus, a typical reflective display is incompatible with the light guiding sheet of Mamiya because the apparatus of Mamiya would evenly distribute light across the back surface of the reflective display. Because a reflective display requires illumination from above the top surface of the display, the apparatus of Mamiya is ineffective for illuminating a reflective display.

The Applicants further submit that Mamiya does not teach or suggest using a reflective display at all in the specification or any motivation for using one. Additionally, the Applicants respectfully submit that Mamiya does not teach or suggest the additional claim limitation of an embedded light guide extending through a reflective display as recited independent Claims 1, 12, and 23 of the present invention. Furthermore, the light guiding sheet of Mamiya is a separate component of the display assembly from the liquid crystal display.

In embodiments of the present invention, the embedded light guides recited in Claims 1, 12, and 23 extend through the reflective display and conduct light (e.g., through regions between pixels or sub-pixel areas) to the region above the reflective display. The embedded light guides themselves do not illuminate the pixels or subpixel regions, but merely conduct light through the reflective display in regions surrounding the pixels or sub-pixels. The light is then reflected back onto the top

PALM-3698.SG Serial No.: 09/997,532 Group Art Unit: 2814 10

surface of the reflective display by a top light reflecting film disposed above the reflective display. As a result of the light being reflected by the top light reflecting film, the characters displayed upon the reflective display are then rendered legible.

Thus, while a backlight device is used, the reflective display is illuminated by the light reflected from above by the reflective layer.

The Applicants respectfully submit that these limitations are neither taught nor suggested by Mamiya. Accordingly, the Applicants respectfully submit that the rejection of Claims 1, 12, and 23 of the present invention overcome the cited reference under 35 U.S.C. § 102(b).

With respect to Claims 2 and 13, the rejection cites polarizing plate 116 of Figure 14 of Mamiya as anticipating the reflecting film recited in the Claims. The Applicants respectfully submit that a polarizing plate would not be reasonably interpreted by one skilled in the art as being comparable or interchangeable with a reflecting film. Furthermore, Claims 2 and 13 recite, "a front light reflecting film disposed above said top surface of said reflective display." This is clearly shown as front light reflecting film 440 of Figure 4A. The Applicants respectfully submit that Mamiya clearly shows in Figure 14 that polarizing plate 116 is disposed beneath liquid crystal display panel 100. Mamiya also shows a polarizing plate 116 in Figure 8 and states (emphasis added):

The light which propagates through the glass substrate 120 is refracted and incident on the light guiding sheet 1 whose refractive index is slightly greater, and then the light is reflected at the boundary surface of each film, passes through the polarizing plate 116, is reflected by the reflecting plate 108,

PALM-3698.SG Serial No.: 09/997,532 Examiner: RAO, STEVEN H. 11 Group Art Unit: 2814 again passes through the polarizing plate 116, and is incident on the glass substrate as S-polarized light (light path, a, of FIG. 8).

Thus, the teaching of Mamiya specifically states that light passes through the polarizing layer and is not reflected by it. Accordingly, the Applicants respectfully assert that Claims 2, and 13 overcome the cited reference under 35 U.S.C. § 102(b).

With respect to Claims 3, and 14, the rejection cites column 10, lines 45-46 as anticipating the present invention. The Applicants respectfully submit that Mamiya does not teach or suggest utilizing a reflective display as recited in independent Claims 1 and 12 of the present invention. Therefore, the Applicants respectfully submit that Claims 3 and 5, which depend from Claim 1, are not anticipated by Mamiya. Furthermore, the Applicants did not find any teaching in Mamiya to suggest using a electro-luminescent light device as the backlighting device. More specifically, column 10 lines 45-46 refer to attaching light guiding sheet 1 to the back surface of the array-side glass substrate 120. Accordingly, the Applicants respectfully assert that Claims 3, and 14 overcome the cited reference under 35 U.S.C. § 102(b).

With respect to Claims 5, and 16, the Applicants respectfully submit that

Mamiya does not teach or suggest utilizing a reflective display as recited in

independent Claims 1 and 12 of the present invention. Claims 5 and 16 depend from

Claims 1 and 12 respectively and recite additional limitations descriptive of

PALM-3698.SG Serial No.: 09/997,532

embodiments of the present invention. Accordingly, the Applicants respectfully assert that Claims 5, and 16 overcome the cited reference under 35 U.S.C. § 102(b).

With respect to Claims 6 and 17, the rejection cites column 9, lines 10-39 as anticipating the present invention. Claim 6 of the present invention recites (emphasis added);

a brightness enhancing film (BEF) disposed between said backlight device and said bottom surface of said reflective display and for <u>directing light toward said embedded light guide</u>.

Claim 17 recites similar Claim limitations. The Applicants respectfully submit that Mamiya does not teach or suggest the combination of directing light toward an embedded light guide extending through a reflective display as recited in Claims 6 and 17 of the present invention. Additionally, the Applicants respectfully submit that the backlight apparatus of Mamiya shows backlight 114 disposed to the side of display 100 and extending along one axis thereof. The Applicants assert that light guide sheet 1 is therefore not disposed between the backlight device and the bottom surface of a reflective display as recited in Claims 6 and 17 of the present invention. Accordingly, the Applicants respectfully assert that Claims 6 and 17 overcome the cited reference under 35 U.S.C. § 102(b).

With respect to Claims 7, 8, 29, 30, and 31, the rejection states that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitation. The Applicants respectfully submit that Mamiya does not satisfy the claimed structural limitation of the present invention

PALM-3698.SG Serial No.: 09/997,532 13 Group Art Unit: 2814 and, therefore, the recited claim limitations of Claims 7, 8, 18, 19, 29, 30, and 31 are novel. For example, Claims 7 and 8 depend from Claim 1. As discussed above, the Applicants respectfully submit that the apparatus of Mamiya is not compatible with a reflexive display as recited in Claim 1. The Applicants further submit that Mamiya does not teach or anticipate an embedded light guide extending through a reflexive display as recited in Claim 1. Therefore, the Applicants respectfully submit that Mamiya does not satisfy the claimed structural limitation of the present invention recited in Claim 1. Accordingly, the Applicants respectfully assert that Claims 7 and 8 overcome the cited reference under 35 U.S.C. § 102(b).

Claims 18 and 19 depend from Claim 12 which recites (emphasis added):

<u>a reflective display</u> disposed above said backlight device and comprising <u>an embedded light guide</u> for conducting light from said backlight device to an area above said reflective display.

The Applicants respectfully submit that Mamiya does not satisfy the claimed structural limitations of Claim 12. Accordingly, the Applicants respectfully assert that Claims 18 and 19 overcome the cited reference under 35 U.S.C. § 102(b).

Claims 29, 30, and 31 depend from Claim 23 which recites (emphasis added):

a reflective display disposed above said backlight device; and a plurality of embedded light guides extending through said reflective display and enclosing a display area within said reflective display, wherein said plurality of embedded light guides conduct light from said backlight device to an area above said reflective display.

The Applicants respectfully submit that Mamiya does not satisfy the claimed structural limitations of Claim 23. Accordingly, the Applicants respectfully assert that Claims 29, 30, and 31 overcome the cited reference under 35 U.S.C. § 102(b).

PALM-3698.SG Serial No.: 09/997,532 Examiner: RAO, STEVEN H. 14 Group Art Unit: 2814 With respect to Claim 10, the rejection cites column 7, lines 21-25 as anticipating a plurality of embedded light guides which enclose an area of said reflective display. Column 7, lines 21-25 of Mamiya state (emphasis added):

If the refractive index of the light guiding body 104 is smaller than the maximum value of the refractive indexes of the light guiding sheet 1, there is no problem, but it is preferable that the refractive index of the light guiding body 104 be smaller than the minimum value of the refractive indexes of the stacked films.

The Applicants respectfully submit that the cited portion of Mamiya does not teach or suggest a plurality of embedded light guides <u>enclosing an area of a reflective</u> display as recited in Claim 10 and <u>request further clarification</u>.

With regard to Claim 11, the rejection cites Figure 14, column 7, lines 35-40, and column 10 line 35, as anticipating a plurality of embedded light guides which enclose a sub-pixel of a reflective display. The Applicants respectfully submit that Figure 14 of Mamiya does not show or suggest a sub-pixel area of a reflective display. Column 7, lines 35-40 of Mamiya state (emphasis added):

The light reflected directly by the light guiding sheet 1 has a large number of S-polarized components, and many of the S-polarized components are incident on the glass substrate of the liquid crystal panel by the polarizing plate 116 which allows the S-polarized light to pass through.

The Applicants respectfully submit that this does not teach or suggest a plurality of embedded light guides which enclose a sub-pixel of a reflective display as recited in Claim 11 of the present invention. Column 10, lines 32-36 of Mamiya state (emphasis added):

PALM-3698.SG Serial I Examiner: RAO, STEVEN H. 15 Group

Serial No.: 09/997,532 Group Art Unit: 2814

For the cell-side glass substrate 122, a color filter of three primary colors (red, green, and blue) is formed in correspondence with each pixel electrode, and between the color filters, there is formed a black matrix which is a light shielding layer

The Applicants respectfully submit that this does not teach or suggest a plurality of embedded light guides which enclose a sub-pixel of a reflective display as recited in Claim 11 of the present invention. Furthermore, a black matrix which is a light shielding layer between color sub-pixels teaches away from a plurality of embedded light guides which enclose a sub-pixel of a reflective display as recited in Claim 11 of the present invention. Accordingly, the Applicants respectfully assert that Claim 11 overcomes the cited reference under 35 U.S.C. § 102(b).

With respect to Claim 21, the rejection cites column 1, lines 50-55 as anticipating a plurality of embedded light guides which enclose an area of a reflective display. Column 1, lines 50-55 of Mamiya states (emphasis added):

On the back surface of the light guiding body 104 of FIG. 14 there is a printed dot pattern for diffusely reflecting light that propagates through the light guiding body 104. A reflecting sheet 108 is attached to the entire back surface of the light guiding body 104. A light diffusing plate 110 and one or two prism sheets 112 are provided between the polarizing plate 116 and the light guiding body.

The Applicants respectfully submit that the printed dot pattern taught by Mamiya does not teach or suggest a plurality of embedded light guides which extend through a display device and enclose a portion thereof. Accordingly, the Applicants respectfully assert that Claim 21 overcomes the cited reference under 35 U.S.C. § 102(b).

Serial No.: 09/997,532 PALM-3698.SG

Examiner: RAO, STEVEN H. 16 Group Art Unit: 2814

With respect to Claim 22, the rejection cit es Figure 14 and column 7, lines 35-40 as anticipating a plurality of embedded light guides which enclose a sub-pixel of a reflective display. As discussed above with respect to Claim 11, the Applicants respectfully submit that Mamiya does not teach or suggest a reflective display, an embedded light guide extending through the reflective display, or a plurality of embedded light guides enclosing a sub-pixel area as recited in Claim 22. Additionally, the Applicants respectfully submit that Mamiya teaches away from conducting light through embedded light guides enclosing the sub-pixel area in teaching that the sub-pixels are surrounded by a black matrix that is a light shielding layer. Accordingly, the Applicants respectfully assert that Claim 22 overcomes the cited reference under 35 U.S.C. § 102(b).

With respect to Claim 23, the rejection cites the rejection of Claims 1 and 11 as anticipating the recited limitations of Claim 23 comprising (emphasis added):

a backlight device;

a reflective display disposed above said b acklight device; and a plurality of embedded light guides extending through said reflective display and enclosing a display area within said reflective display, wherein said embedded light guides conduct light from said backlight device to an area above said reflective display wherein the light is reflected onto said reflective display.

As discussed above with respect to Claim 1, the Applicants respectfully submit that Mamiya does not teach or suggest a reflective display disposed above a backlight device, or a plurality of embedded light guides extending through the reflective display and enclosing a display area of the reflective display. As discussed above with respect to Claim 11, the Applicants respectfully submit that Mamiya does not

Serial No.: 09/997,532 PALM-3698.SG 17 Group Art Unit: 2814

Examiner: RAO, STEVEN H.

teach or suggest a plurality embedded light guides extending through a reflective display that enclose a sub-pixel area. Furthermore, with respect to Claim 11, the Applicants respectfully submit that Mamiya teaches away from conducting light through the area surrounding the sub-pixel area in teaching that the sub-pixels are surrounded by a black matrix that is a light shielding layer. Accordingly, the Applicants respectfully assert that Claim 23 overcomes the cited reference under 35 U.S.C. § 102(b).

With respect to Claim 24, the reject ion cites the rejection of Claim 2 as anticipating a front light reflecting film disposed above a reflective display and operable to reflect light back onto the reflective display. With respect to Claim 2, the Applicants respectfully submit that a polarizing plate disposed beneath a transmissive LCD display does not teach or suggest a light reflecting film disposed above a reflective display. Accordingly, the Applicants respectfully assert that Claim 24 overcomes the cited reference under 35 U.S.C. § 102(b).

With respect to Claim 25, the rejection cites Mamiya and column 3, lines 17-20 of U.S. Patent No. 6,191,833, hereinafter referred to as "Hirakata." The Applicants respectfully submit that neither Mamiya nor Hirakata teach or suggest utilizing a backlight device to illuminate a reflective display as recited in independent Claim 23. Furthermore, neither Mamiya nor Hirakata teach or suggest using an electroluminescent device as a backlight device for a reflective display. Additionally, the cited portion of Hirakata teaches a backlight device of a side-edge scheme type (e.g., a fluorescent tube or light-emitting diode) and does not teach or suggest either a

Serial No.: 09/997,532 PALM-3698.SG Group Art Unit: 2814 Examiner: RAO, STEVEN H. 18

reflective display or a plurality of embedded light guides extending through the reflective display as recited in Claim 23 of the present invention. Claim 25 depends from Claim 23 and recites additional claim limitations descriptive of the present invention. Accordingly, the Applicants respectfully assert that Claim 25 overcomes the cited reference under 35 U.S.C. § 102(b).

With respect to Claim 27, the rejection cites the rejection of Claim 23 and column 10, lines 45-46 of Mamiya. However, the Applicants respectfully submit that Mamiya does not teach or suggest a reflective display, or a plurality of embedded light guides extending through the reflective display as recited in Claim 23 of the present invention. Claim 27 depends from Claim 23 and recites additional claim limitations descriptive of the present invention. Accordingly, the Applicants respectfully assert that Claim 27 overcomes the cited reference under 35 U.S.C. § 102(b).

With respect to Claim 28, the rejection cites column 9, lines 10-39 of Mamiya as anticipating a brightness enhancing film disposed above a backlight device for directing light toward a plurality of embedded light guides. As discussed above with reference to Claims 6 and 17, the Applicants respectfully submit that Mamiya does not teach or suggest a reflective display with a plurality of embedded light guides extending therethrough. Accordingly, the cited portion of Mamiya does not teach or suggest a brightness enhancing film disposed above a backlight device for directing light toward a plurality of embedded light guides as recited in Claim 28 of the present invention. Claim 28 depends from Claim 23 and recites additional claim

PALM-3698.SG Serial No.: 09/997,532 Examiner: RAO, STEVEN H. 19 Group Art Unit: 2814 limitations descriptive of the present invention. Accordingly, the Applicants respectfully assert that Claim 28 overcomes the cited reference under 35 U.S.C. § 102(b).

With respect to C laim 32, the rejection cites Figure 14 and column 7, lines 35-40 as anticipating a plurality of embedded light guides enclosing a sub-pixel area of a reflective display. The Applicants respectfully submit that Mamiya does not teach or suggest a reflective display as recited in Claim 23 of the present invention. Additionally, Mamiya does not teach or suggest a plurality of embedded light guides extending through a reflective display as recited in Claim 23 of the present invention. Furthermore, with respect to the discussion above with respect to Claim 11, the Applicants respectfully submit that Mamiya does not teach or suggest a plurality of embedded light guides enclosing a sub-pixel area of a reflective display as recited in Claim 32 of the present invention. Additionally, the Applicants respectfully submit that Mamiya teaches away from conducting light through the area surrounding the sub-pixel area in teaching that the sub-pixels are surrounded by a black matrix that is a light shielding layer. Accordingly, the Applicants respectfully assert that Claim 32 overcomes the cited reference under 35 U.S.C. § 102(b).

35 U.S.C. § 103 Rejections

Claims 4, 15, and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mamiya in further view or Hirakata et al. (U.S. Patent No. 6,191,833) hereinafter referred to as "Hirakata." The Applicants respectfully submit

Serial No.: 09/997,532 Group Art Unit: 2814 PALM-3698.SG

Examiner: RAO, STEVEN H. 20 that the recited claim limitations of Claims 4, 15, and 26 are not rendered obvious by Mamiya alone or in combination with Hirakata.

With respect to Claim 4, the Applicants respectfully submit that Mamiya does not teach or suggest a reflective display or an embedded light guide extending through the reflective display as recited in Claim 1 of the present invention. Moreover, Hirakata does not overcome the shortcomings of Mamiya. Therefore, the Applicants respectfully submit that the claimed combination of a backlight device containing at least one light emitting diode, a reflective display, and an embedded light guide within the reflective display as recited in Claim 4 of the present invention is not rendered obvious by Mamiya alone, or in combination with Hirakata. Accordingly, the Applicants respectfully assert that the rejection of Claim 4 under 35 U.S.C. § 103(a) has been overcome.

With respect to Claim 15, the Applicants respectfully submit that Mamiya does not teach or suggest a reflective display with an embedded light guide extending therethrough as recited in Claim 12 of the present invention. Hirakata does not overcome the shortcomings of Mamiya. Therefore, the Applicants respectfully submit that the combination of a backlight device containing at least one light emitting diode, a reflective display with an embedded light guide extending therethrough as recited in Claim 15 of the present invention is not rendered obvious by Mamiya alone, or in combination with Hirakata. Accordingly, the Applicants respectfully assert that the rejection of Claim 15 under 35 U.S.C. § 103(a) has been overcome.

Serial No.: 09/997,532 PALM-3698.SG Group Art Unit: 2814 Examiner: RAO, STEVEN H.

With respect to Claim 26, the Applicants respectfully submit that Mamiya does not teach or suggest a reflective display with an embedded light guide extending therethrough as recited in Claim 12 of the present invention. Hirakata does not overcome the shortcomings of Mamiya. Therefore, the Applicants respectfully submit that the combination of a backlight device containing at least one light emitting diode, a reflective display, and a plurality of light guides extending through the reflective display as recited in Claim 26 of the present invention is not rendered obvious by Mamiya alone, or in combination with Hirakata. Accordingly, the Applicants respectfully assert that the rejection of Claim 26 under 35 U.S.C. § 103(a) has been overcome.

General Response to Arguments

The rejection states that a back light or illuminated LCD can only be a transmissive LCD is at odds with the Applicants specification and cites page 1, lines 6-9, page 5, lines 11-15, and page 6, lines 1-4 of the Applicants' specification. The Applicants respectfully agree with the contention that a conventional reflective display would typically not be compatible with a backlight assembly. However, the embedded light guides claimed in Claims 1, 12, and 23 (e.g., light guides 433 of Figure 4A and 4B) facilitate conducting light through the portions of the reflective display which surround a pixel or sub-pixel area (e.g., 434 of Figure 4A and 4B). Figure 4B clearly shows that the light conducted by the light guides 434 is not conducted in the pixel or sub-pixel region 434 and therefore, the pixel itself is not <u>illuminated</u>. Instead, the light is conducted by the embedded light guides

Serial No.: 09/997,532 PALM-3698.SG 22 Group Art Unit: 2814 surrounding the pixel or sub-pixel to the region above reflective display 430, and is reflected by front light reflecting film 440 onto the top surface of reflective display 430, thus illuminating the pixel or sub-pixels of the display. Accordingly, the Applicants respectfully assert that the teaching in the specification of the present invention is not at odds with the contention that a back lighted LCD can only be a transmissive LCD.

The rejection further states that transmissive and reflective LCDs can be interchangeably as taught by McKnight (U.S. No. 6,700,557), hereinafter referred to as "McKnight," and Baek et al (U.S. No. 6,697,135), hereinafter referred to as "Baek." The Applicants respectfully assert that the terms "reflective display," "transmissive display," and "transflective display" are well known in the art and specifically refer to distinctly different devices. Furthermore, while any of these display devices may be used individually in an electronic device, there is no teaching in Mamiya, McKnight, or Baek to suggest that components of these devices can be used interchangeably with any expectation of success.

Thus, while McKnight teaches that a reflective display or a transmissive display may be used, there is no teaching or suggestion in McKnight that a backlight assembly is operable for illuminating a reflective display. Additionally, there is no teaching or suggestion in McKnight of using embedded light guides extending through a reflective display to convey light from a backlight assembly to illuminate a reflective display as recited in Claims 1, 12, and 23 of the present invention. Similarly, Baek does not teach or suggest using a backlight assembly to illuminate a

Serial No.: 09/997,532 PALM-3698.SG Group Art Unit: 2814 reflective display. Nor does Baek teach or suggest using embedded light guides extending through a reflective display to convey light from a backlight assembly to illuminate a reflective display as recited in Claims 1, 12, and 23 of the present invention. The apparatus of Mamiya is consistent with a backlight device used with a transmissive display and does not teach or suggest that the backlight apparatus can be used with a reflective display as recited in Claims 1, 12, and 23 of the present invention. Accordingly, the Applicants respectfully submit that the assertion that the present invention is either inoperable or operates in a different way therefore is not supported by the cited references or the art.

The rejection cites Figure 14 of Mamiya as showing an embedded light guide within a reflective display. The Applicants respectfully submit that light guiding body 104 is neither embedded nor a component of liquid crystal display panel 100. Instead, light guiding body 104 is a separate component from liquid crystal display panel 100 and is separated by intervening components 110, 112, and 116. Accordingly, the Applicants respectfully assert that a light guiding body which is separated by intervening components from a display device does not anticipate a reflective display having an embedded light guide extending therethrough.

The rejection cites Figure 8 as showing a polarizing layer 116 which reflects light as anticipating a front light reflecting film. In column 11, lines 4-12 Mamiya states (emphasis added):

The light which propagates through the glass substrate 120 is refracted and incident on the light guiding sheet 1 whose refractive index is slightly greater, and then the light is reflected at the boundary surface of each film, passes through the polarizing plate 116, is reflected by the reflecting plate 108,

PALM-3698.SG Serial No.: 09/997,532 Examiner: RAO, STEVEN H. 24 Group Art Unit: 2814 again passes through the polarizing plate 116, and is incident on the glass substrate as S-polarized light (light path, a, of FIG. 8).

The Applicants respectfully submit that the teaching of Mamiya clearly shows that polarizing plate 116 is not a reflective layer and that the representation of Figure 8 is in error. Accordingly, the Applicants respectfully submit that Mamiya does not teach or suggest a front light reflecting film disposed above a reflective display as recited in Claims 2, 13, and 24 of the present invention.

The rejection further cites layers 116 of Figures 8 and 14 as anticipating a front light reflecting film. However, Mamiya describes layer 116 of Figure 8 as a polarizing plate (column 11, line 9) and layer 116 of Figure 14 as a polarizing plate (column 1, line 35). As described above, the teaching of Mamiya clearly states that light passes through the polarizing plate and is not reflected by it. Accordingly, the Applicants respectfully submit that Mamiya does not teach or suggest a front light reflecting film as recited in Claims 2, 13, and 24 of the present invention.

The rejection states that the Applicants arguments are not consistent with the recited Claims. Claims 1, 12, and 23 are amended herein and clearly recite the claimed invention. The rejection then cites a plurality of light guides (e.g., column 1, lines 50-60 of Mamiya) as describing a plurality of light guides embedded within a reflective display. As described above, there is no teaching or suggestion that a reflective display is used or is compatible with the apparatus of Mamiya. Furthermore, the prisms are disposed on the back of light guiding body 104 (column

Serial No.: 09/997,532 PALM-3698.SG

1, line 49) and are not embedded within liquid crystal display 100 which is a separate component of the display assembly shown in Figure 14.

PALM-3698.SG Serial No.: 09/997,532 Examiner: RAO, STEVEN H. 26 Group Art Unit: 2814

CONCLUSION

Based on the arguments presented above, the Applicants respectfully assert that Claims 1-32 overcome the rejections of record and, therefore, the Applicants respectfully solicit allowance of these Claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Date: 6/3/2004

Respectfully submitted,

WAGNER, MURAPITO & HAO LLP

Anthony C. Murabito Reg. No. 35,295

Two North Market Street Third Floor San Jose, California 95113 (408) 938-9060

Serial No.: 09/997,532

Group Art Unit: 2814